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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

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Art Unit: 2155 Examiner: Mr. Shawki Saif Ismail

In re PATENT APPLICATION of: Shin TORIGOE et al **Applicant** 10/720,690 Serial No. November 25, 2003 APPEAL BRIEF Filed WEB PAGE UPDATE For NOTIFICATION METHOD AND WEB PAGE UPDATE NOTIFICATION DEVICE Attorney Ref. : OKI 390 March 5, 2007 03/06/2007 HMARZII 00000127 10/20690 Attn: Mail Stop Appeal Brief-Patents Commissioner for Patents 01 FC:1402 500.00 02 PO Box 1450 Alexandria, VA 22313-1450

Sir:

INTRODUCTION

This is an Appeal to the Board of Patent Appeals and Interferences from the decision, in the Office Action dated August 4, 2006, finally rejecting claims 2-5, 7-11, 13-16 and 18-23. A Notice of Appeal and a Petition for an extension of time were filed on January 4, 2007, thus making the due-date for the present Appeal Brief March 4, 2007 (a Sunday, and consequently on the following Monday, March 5, 2007).

A fee of \$_____ is being submitted concurrently. Should this remittance be accidentally missing, however, or should any additional fees be needed (including extension of time fees, since Appellants hereby provisionally petition for any extensions

that may be deemed necessary to avoid abandonment), the Director may charge such fees to our Deposit Account number 18-0002.

(i) REAL PARTY IN INTEREST

The real party in interest in this appeal is the Assignee, Oki Electric Industry Co., Ltd.

(ii) RELATED APPEALS AND INTERFERENCES

To the best of the knowledge and belief of the undersigned attorney, there are no prior or pending appeals, interferences, or judicial proceedings which may be related to, directly affect or be directly affected by, or have a bearing on the Board's decision in the pending appeal.

(iii) STATUS OF THE CLAIMS

Claims 2-5, 7-11, 13-16, and 18-23 are pending in this application. Claims 1, 6, 12, and 17 have been cancelled. No claims have been allowed.

(iv) STATUS OF AMENDMENTS

An Amendment After Final Rejection was filed on December 4, 2006. An Advisory Action dated December 28, 2006 reported that the claims remained finally rejected and that the Amendment After Final Rejection would not be entered. A paper entitled "Letter" was filed on January 4, 2007 to request entry of the Amendment After Final Rejection for purposes of appeal. Since no response to this letter was received by the week before the due-date for this Appeal Brief, the undersigned attorney left a telephone

message asking the Examiner about the matter. The Examiner responded with a telephone message (the undersigned attorney was out of the office for the rest of the week) explaining that he had never received the Letter. The undersigned attorney did not pursue the matter further due to the looming due-date for this Brief.

The Amendment After Final Rejection would have cancelled independent claim 23 and corrected a minor informality in independent claim 18. As a result of the non-entry of the Amendment After Final Rejection, claim 23 is among the claims on appeal.

(v) <u>SUMMARY OF CLAIMED SUBJECT MATTER</u>

The present application discloses several embodiments of a system for notifying people when a web page of interest is updated. In the embodiment shown in Figures 1-4, an update notification device 10 is connected to multiple web servers 1a through 1c and to multiple user terminals 4a through 4c through the internet 2 and/or a mobile telephone network 3 (page 4, lines 15-17). The update notification device 10, which may be a general server computer, includes a setting portion 12, an update detecting portion 13, a notification portion 15, an article creating portion 14, a mail creating portion 17, and a database 11 (page 5, lines 17-21).

The URLs of web pages of interest are input through the user terminals 4a through 4c, and the setting portion 12 stores these URLs in the database 11 (page 5, line 22 to page 6, line 1). The database 11 also stores the addresses of the user terminals (page 9, lines 20-23). The update detecting portion 13 accesses the web pages corresponding to the URLs at predetermined intervals and compares the most recent version of each page to the previous

version to detect differences from the previous access (page 6, lines 2-10). The update detecting portion 13 then extracts the differences as updated parts (page 6, lines 10-12).

The article creating portion 14 creates an article title and body that are to be included in a notification message in accordance with the updated part, and the mail creating portion 17 creates the notification message (page 6, lines 13-20). A notification message is created for each of the user terminals 4a through 4c that is to be notified and includes information notifying users of updates by one or more of the web servers 1a through 1c corresponding to the URS specified by the users (page 6, line 21 to page 7, line 1). Alternatively, the notification message may have the form of a mail magazine that is sent to multiple user terminals instead of being created exclusively for one user terminal (page 7, lines 2-6). The notification portion 15 sends the notification messages to the user terminals (page 7, lines 7-10).

The process executed by the update notification device 10 is illustrated in Figure 2 and described in the passage at page 7 of the application, line 18 to page 10, line 18. The update detection portion 13 reads the URLs of the web pages from the database 11 in step S1, the web pages are accessed in step S2, and updates are detected in step S3. If a web page has been updated, the new version is stored in step S4. The article creating portion obtains the difference (or differential information, an example of which is shown in Figure 3) between the old and new versions of the web page from the update notification device 10 in step S5, and the article creating portion 14 uses the differential information to create an article in step S6. After the last URL has been checked at step S7, the mail creating portion 17 creates the bodies of notification messages in step S8. The notification

messages are sent by the notification portion 15 in step S9. Examples of notification messages are shown in Figure 4.

In the embodiment shown in Figures 5-7, a template retrieving portion 33 and a subject creating portion 36 are added to the update notification device 10. The template retrieving portion 33 retrieves a web page template from the database 11 and supplies it to the update detecting portion 13 or to the article creating portion 14 (page 11, lines 20-22). The subject creating portion 36 creates a subject, or mail title, for the notification message (page 11, line 22 to page 12, line 1).

The process executed by the update notification device 10 in this embodiment is shown in Figure 6 and described in the passage at page 12, line 18 to page 15, line 7). This process is a modification of the process shown in Figure 2 for the first embodiment and it is therefore appropriate to describe only noteworthy differences. In step S55, the template retrieving portion 33 obtains the web template corresponding to a URL from the database 11 (page 13, lines 9-12). The web template and the updated web page data are matched and/or the differences between them are obtained in step S56 (page 13, lines 13-15). The article creating portion 14 uses the data extracted from the matching, in step S57, to create an article (page 13, lines 16-21). After the last URL has been detected in step S58, the mail creating portion 17 creates one or more articles in accordance with a notification message template and the body of the notification message is created in step S59 (page 14, lines 2-5). The template of the body of the notification message can include updated data corresponding to multiple URLs, as in template T2 in Figure 7 (page 14, lines 5-9). An issue number for the notification message is assigned in step S60, and a title or subject of the notification message is provided in step S61 (page 14, lines 10-16). Then the

notification messages are sent in step S62. In Figure 7, T1 is an example of a template of an article, T2 is an example of a template of the body of a notification message, and M4 is an example of a notification message (page 14, line 23 to page 15, line 7).

The third embodiment is shown in Figure 8-10. In the third embodiment, the update notification device 10 of Figure 1 is supplemented with a main passage extracting portion 25, a filter portion 25, a degree-of-attention compiling portion 27, a header creating portion 28, and an issue number incrementing portion 29. The main passage extracting portion 24 extracts a main passage from the differential information when the differential information is equal to or greater than a predetermined threshold value (such as 100 letters or ten lines) (page 16, lines 10-14). The filter portion 25 removes articles without a keyword that is set in the database 11 (page 16, lines 14-15). The degree-of-attention compiling portion 27 compiles articles gathering attention from users (page 16, lines 15-17). The header creating portion 28 creates mail headers for the notification messages, and the issue number incrementing portion assigns issue numbers to the notification messages for each user (page 16, lines 15-20). The database 11 in this embodiment includes one or more keywords corresponding to each user (page 16, line 23 to page 17, line 1).

The process executed by the update notification device 10 of the third embodiment is shown in Figure 9. One noteworthy feature is steps S26 and S27, where the main passage extracting portion 24 condenses the differential information if it is equal to or greater than the threshold value (page 17, line 21 to page 18, line 3). Another noteworthy feature is that a loop is started in the degree-of-attention compiling portion 27 after an article has been created in step S28 (page 18, lines 11-14). Articles that include keywords set by users are moved up in rank in step S32 (page 18, line 14 to page 19, line 3). The

highest-ranking articles are later extracted, in step S36, and can then be sent at the beginning of the notification messages, or all or the articles may be sorted in ranking order (page 19, line 25 to page 20, line 9).

The following claim charts show examples of how the claims that will be separately argued later in this Brief can be read on the disclosure

- 3. An update notification device according to claim 7, wherein the updated data extracting means has means (24) for converting the updated data to a main passage when the size of the differential information piece is equal to or more than a predetermined threshold value.
- 7. An update notification device (10) for repeatedly accessing at least one web site (1a, 1b, and 1c) identifiable with a preset address and outputting a notification message if any web page has been updated in the at least one web site, the device comprising:

updated data extracting means (13, 24, 25, and 27) for extracting updated data from an updated web page;

notification-receiver's address holding means (11) for holding the address of a user terminal (4a, 4b, or 4c) for receiving a notification message with respect to each at least one web site with an updated web page;

updated data output means (14, 15, 17, and 28) for adding, to the notification message, at least one of a header of the updated data, at least some of the updated data, and information about the address of the updated

web page, the updated data output means sending the notification message to the address of the user terminal,

wherein the notification-receiver's address holding means (11) further has means for holding at least one keyword with respect to the address of the user terminal, and

wherein the updated data extracting means has means (25) for removing a differential information piece from the updated data when the differential information piece does not include the held keyword, the differential information piece representing differences between old and new web page data.

- 8. An update notification device according to Claim 7, wherein the updated data extracting means has means (27) for compiling a rank, which indicates a degree-of-attention of the web page, in accordance with the frequency of occurrence of updated data having a keyword corresponding to each user terminal.
- 14. An update notification method according to Claim 18, wherein the updated data extracting step has a step (performed by 24) for converting the updated data to a main passage when the size of the differential information piece is equal to or more than a predetermined threshold value.
- 18. An update notification method for repeatedly accessing at least one web site (1a, 1b, and 1c) identifiable with a preset address and outputting a notification message if any web page has been updated in the at least one web site, the method comprising:

an updated data extracting step (performed by 13, 24, 25, and 27) for extracting updated data from an updated web page;

a notification-receiver's address holding step (performed by 11) for holding the address of a user terminal (4a, 4b, or 4c) for receiving a notification message with respect to each at least one web site with an updated web page; and

an updated data output step (performed by 14, 15, 17, and 28) for adding, to the notification message, at least one of a header of the updated data, at least some of the updated data, and information about the address of the updated web page, and for sending the notification message to the address of the user terminal,

wherein the notification-receivers address holding step further has a step (performed by 11) for holding at least one keyword with respect to the address of the user terminal, and

wherein the updated data extracting step has a step (25) for removing a differential information piece from the updated data when the differential information piece does not include the held keyword, the differential information piece representing differences between old and new web page data.

23. A method for monitoring a web site (1a, 1b, or 1c), comprising the steps of:

repeatedly accessing the web site (performed by 13);

-9-

detecting differences between old web site data and new web site data(performed by 13);

determining whether the differences include a keyword set by a user (performed by 25); and

notifying the user (4a, 4b, or 4c) that the web site has been updated if the differences include the keyword (performed by 14, 15, and 17).

(vi) GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

All of the pending claims stand rejecting under 35 USC 103 on the basis of US patent 5,890,836 to Freivald in view of US patent 6,915,482 to Jellum et al. For the sake of convenient discussion, these references will hereafter be called simply "Freivald" and "Jellum."

(vii) ARGUMENT

The Independent Claims:

Independent claim 7 recites that a notification-receiver's address holding means includes "means for holding at least one keyword...". Claim 7 also provides that a "differential information piece" represents differences between old and new web page data, and that an updated data extracting means includes "means for removing [the] differential information piece from the updated data when the differential information piece does not include the held keyword."

At the middle of page 4, the Office Action of August 4, 2006 acknowledges that Freivald does not disclose these features. The Office Action then turns to Jellum, and

concludes that it would have been obvious to incorporate the teachings of Jellum into Freivald's system in order to provide precise notification of a changed document. Not surprisingly, Applicants respectfully disagree with this conclusion.

The operation of Freivald's system is summarized in the abstract of the reference.

A web page is divided into sections and a checksum is generated for each section and stored. During a subsequent visit to the web page, new checksums are generated. If the old checksum does not match the new checksum in a section of interest to a user, the user is notified that a change has occurred.

Jellum's technique for detecting changes is considerably different. Jellum detects changes by comparing an old XML file to a new XML file (see column 9, lines 12-16).

It is respectfully submitted that an ordinarily skilled person who wanted to improve Freivald's system in some way would not have been interested in Jellum's keywords. The reason is that the ordinarily skilled person would likely think that any information about a keyword, in a section of interest to a user of Freivald's arrangement, would not be preserved when the section of interest in converted to a checksum in accordance with the Freivald reference. It is therefore respectfully submitted that Jellum would not have led an ordinarily skilled person to modify Freivald so as to achieve the invention defined by independent claim 7.

Independent claim 18 is similar to claim 7, except that it is a method claim instead of an apparatus claim. It is respectfully submitted that the invention defined by claim 18 is patentable over the references for the same reasons discussed above with respect to claim 7.

Independent claim 23 is a method claim in which differences between old website data and new website data are detected and a determination is made as to whether these differences include a keyword. Claim 23 concludes by reciting the step of "notifying the user that the web site has been updated if the differences include the keyword." It is respectfully submitted that the invention defined by claim 23 would not have been obvious from Freivald and Jellum, for basically the same reasons discussed above with respect to claim 7. Freivald's scheme for detecting changes in a website involves comparing an old checksum with a new checksum. An ordinarily skilled person would have had no reason to think that one of Jellum's keywords in a section of interest would retain its identity as a keyword after this checksum conversion.

The Dependent Claims:

Since the remaining claims depend from the independent claims discussed above and recite additional limitations to further define the invention, they are patentable along with their independent claims. Nevertheless, several dependent claims will now be briefly addressed.

Claim 3 depends from independent claim 7 and recites that "the updated data extracting means has means for converting the updated data to a main passage when the size of the differential information piece is equal to or more than a predetermined threshold value." Claim 14 is similar, but depends from independent claim 18. It is respectfully submitted that the references would not have led an ordinarily skilled person to condense updated data to a main passage if the differences between an old web page and a new web page are large. With regard to claim 3, the Office Action of August 4, 2006 draws

attention to the passage at column 12 of Freivald, lines 48-56, but this passage simply says that minor changes to a web page can be filtered out by setting a minimum threshold of changes in order to generate a report. (Claims 5 and 16 are similar to claims 3 and 14 but depend only indirectly form their independent claims.)

Claim 8 depends from independent claim 7 and recites that "the updated data extracting means has means for compiling a rank, which indicates a degree-of-attention of the web page, in accordance with the frequency of occurrence of updated data having a keyword corresponding to each user terminal." Claim 19 is similar but depends from independent claim 18. It is respectfully submitted that such ranking is not suggested by the reference. With regard to claim 8, the Office Action of August 4, 2006 refers again to the above-noted passage at column 12, lines 48-56, but it is respectfully submitted that this passage would not have led an ordinarily skilled person to compiling ranks in accordance with a frequency at which updated data contains keywords.

CONCLUSION

For the foregoing reasons, it is respectfully submitted that the rejected claims are patentable over the Freivold and Jellum references. The Examiner's rejection of these claims should therefore be reversed.

Respectfully submitted,

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(viii) CLAIMS APPENDIX

The claims involved in this appeal are presented below.

- 2. An update notification device according to Claim 1, wherein the updated data extracting means extracts the updated data from the differential information piece.
- 3. An update notification device according to claim 7, wherein the updated data extracting means has means for converting the updated data to a main passage when the size of the differential information piece is equal to or more than a predetermined threshold value.
- 4. An update notification device according to Claim 7, wherein the differential information piece pertains to a part of the web page data determined by a template held in advance in accordance with the web page, and the updated data extracting means extracts the updated data from the differential information piece.
- 5. An update notification device according to Claim 4, wherein the updated data extracting means has means for converting the updated data to a main passage when the size of the differential information piece is equal to or more than a predetermined threshold value.
- 7. An update notification device for repeatedly accessing at least one web site identifiable with a preset address and outputting a notification message if any web page has been updated in the at least one web site, the device comprising:

updated data extracting means for extracting updated data from an updated web page;

notification-receiver's address holding means for holding the address of a user terminal for receiving a notification message with respect to each at least one web site with an updated web page;

updated data output means for adding, to the notification message, at least one of a header of the updated data, at least some of the updated data, and information about the

address of the updated web page, the updated data output means sending the notification message to the address of the user terminal,

wherein the notification-receiver's address holding means further has means for holding at least one keyword with respect to the address of the user terminal, and

wherein the updated data extracting means has means for removing a differential information piece from the updated data when the differential information piece does not include the held keyword, the differential information piece representing differences between old and new web page data.

8. An update notification device according to Claim 7,

wherein the updated data extracting means has means for compiling a rank, which indicates a degree-of-attention of the web page, in accordance with the frequency of occurrence of updated data having a keyword corresponding to each user terminal.

- 9. An update notification device according to Claim 7, wherein the updated data output means has means for creating the notification message in accordance with a predetermined template before the output of the notification message.
- 10. An update notification device according to Claim 7, wherein the updated data output means has means for creating a title of the notification message from the updated data.
- 11. An update notification device according to Claim 10, wherein the updated data output means has means for giving, to the title of the notification message, a notification message issue number incremented for each notification message issued with respect to a particular web site or for each user terminal to which the notification message is sent.
- 13. An update notification method according to Claim 18, wherein the updated data extracting step extracts the updated data from the differential information piece.

- 14. An update notification method according to Claim 18, wherein the updated data extracting step has a step for converting the updated data to a main passage when the size of the differential information piece is equal to or more than a predetermined threshold value.
- 15. An update notification method according to Claim 18, wherein the differential information piece pertains to a part of the web page data determined by a template held in advance in accordance with the web page.
- 16. An update notification method according to Claim 15, wherein the updated data extracting step has a step for converting the updated data to a main passage when the size of the differential information piece is equal to or more than a predetermined threshold value.
- 18. An update notification method for repeatedly accessing at least one web site identifiable with a preset address and outputting a notification message if any web page has been updated in the at least one web site, the method comprising:

an updated data extracting step for extracting updated data from an updated web page;

a notification-receiver's address holding step for holding the address of a user terminal for receiving a notification message with respect to each at least one web site with an updated web page; and

an updated data output step for adding, to the notification message, at least one of a header of the updated data, at least some of the updated data, and information about the address of the updated web page, and for sending the notification message to the address of the user terminal,

wherein the notification-receivers address holding step further has a step for holding at least one keyword with respect to the address of the user terminal, and

wherein the updated data extracting step has a step for removing a differential information piece from the updated data when the differential information piece does not

include the held keyword, the differential information piece representing differences between old and new web page data.

- 19. An update notification method according to Claim 18, wherein the updated data extracting step has a step for compiling a rank, which indicates a degree-of-attention of the web page, in accordance with the frequency of occurrence of updated data having a keyword corresponding to each user terminal.
- 20. An update notification method according to Claim 18, wherein the updated data output step has a step for creating the notification message in accordance with a predetermined template before the output of the notification message.
- 21. An update notification method according to Claim 18, wherein the updated data output step has a step for creating a title of the notification message from the updated data.
- 22. An update notification method according to Claim 21, wherein the updated data output step has a step for giving, to the title of the notification message, a notification message issue number incremented for each notification message issued with respect to a particular web site or for each user terminal to which the notification is sent.
- 23. A method for monitoring a web site, comprising the steps of: repeatedly accessing the web site; detecting differences between old web site data and new web site data; determining whether the differences include a keyword set by a user; and notifying the user that the web site has been updated if the differences include the keyword.

(ix) EVIDENCE APPENDIX

No new evidence is being submitted with this Brief.

(x) RELATED PROCEEDINGS APPENDIX

In view of section (ii) of this Brief, no copies of decisions are appended.